

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of

Inquiry Concerning the Deployment of Advanced
Telecommunications Capability to All Americans
In a Reasonable and Timely Fashion, and Possible
Steps to Accelerate Such Deployment Pursuant to
Section 706 of the Telecommunications Act of
1996, as Amended by the Broadband Data
Improvement Act

GN Docket No. 11-121

FCC 11-124

**COMMENTS OF
THE MASSACHUSETTS DEPARTMENT OF
TELECOMMUNICATIONS AND CABLE**

Commonwealth of Massachusetts
Department of Telecommunications and Cable

GEOFFREY G. WHY, COMMISSIONER

1000 Washington Street, Suite 820
Boston, MA 02118-6500
(617) 305-3580

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The Massachusetts Department of Telecommunications and Cable (MDTC)¹ hereby files comments in response to the Eighth Broadband Deployment Notice of Inquiry (NOI) released by the Federal Communications Commission (FCC) on August 5, 2011, in the above-captioned proceeding.² The FCC initiated the NOI to solicit data and information to assist it in its annual task, as required by Section 706 of the Telecommunications Act of 1996, as amended (Act),³ of

¹ The MDTC is the exclusive state regulator of telecommunications and cable services within the Commonwealth of Massachusetts. G. L. c. 25C, § 1.

² *In the Matter of Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, GN Docket No. 11-121, Eighth Broadband Deployment Notice of Inquiry, FCC 11-124 (rel. Aug. 5, 2011) (NOI).

³ Telecommunications Act of 1996, Pub. L. No. 104-104, § 706(b), 110 Stat. 56, 153 (codified at 47 U.S.C. § 1302(b)) (as amended in relevant part by the Broadband Data Improvement Act, Pub. L. No. 110-385, 122 Stat. 4096 (2008)).

determining whether broadband is being deployed to all Americans in a reasonable and timely fashion.⁴ In this NOI, the FCC seeks input on a broad range of issues pertaining to measurement of broadband availability, and the progress made toward full deployment of broadband.⁵ The MDTC urges the FCC to expand its assessment of broadband availability to include all community anchor institutions (CAI) because of the vital nature of these institutions in local communities. The FCC should also collect broadband pricing data and consider affordability as a factor when evaluating the availability of advanced telecommunications capability. Finally, the FCC should maintain the technology-neutral speed benchmark of 4 Mbps download and 1 Mbps upload used in the previous Sixth and Seventh Broadband Progress Reports.⁶

I. THE FCC SHOULD MEASURE AVAILABILITY TO COMMUNITY ANCHOR INSTITUTIONS.

The Seventh Broadband Progress Report briefly assessed the availability of broadband in elementary and secondary schools as required in Section 706.⁷ The Seventh Broadband Progress Report was not able to reach a definitive conclusion about broadband access in classrooms because of the limited data available to the FCC on both school location and access of

⁴ NOI, ¶ 1.

⁵ *Id.* at ¶ 2.

⁶ *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment pursuant to Section 706 of the Telecommunications Act of 1996, As Amended by the Broadband Data Improvement Act; A National Broadband Plan for Our Future*, GN Docket Nos. 09-137, 09-51, Sixth Broadband Progress Report, 25 FCC Rcd 9556 (2010) (Sixth Broadband Progress Report); *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment pursuant to Section 706 of the Telecommunications Act of 1996, As Amended by the Broadband Data Improvement Act; A National Broadband Plan for Our Future*, GN Docket No. 10-159, Seventh Broadband Progress Report, 26 FCC Rcd 8008 (2011) (Seventh Broadband Progress Report).

⁷ *Seventh Broadband Progress Report* at ¶ 54-57.

broadband.⁸ Rather than be discouraged by the lack of available data, the FCC should expand its assessment of broadband availability to include all CAIs because of the vital nature of these institutions in local communities.⁹

The effort to collect data from CAIs is a difficult undertaking. The process requires State Broadband Data and Development (SBDD) agencies to identify the numerous CAIs within their respective states and then to ascertain information individually from each CAI about broadband provision and speed, a time consuming process that may also involve educating some CAIs in an effort to maximize participation. In Massachusetts there are approximately 6,000 potential CAI respondents, including almost 1,800 K-12 public schools.¹⁰ For the first iteration of the National Broadband Map, the Massachusetts Broadband Institute was able to report on data for over 1,300 CAIs, including 319 K-12 schools.¹¹

The initiation of a structured and ongoing assessment of broadband availability to CAIs will encourage a more consistent and thorough collection of data by the various SBDD awardees. Additionally, the FCC should strongly consider reviewing the speed benchmarks for each category of anchor institution. In light of the variety and scalability of applications utilized by anchor institutions relative to household broadband usage, the household benchmark is likely insufficient to meet the minimal needs of the anchor institutions. A comprehensive assessment

⁸ *Id.*

⁹ See Dep't of Commerce, NTIA, *Notice of Funding Availability for the State Broadband Data and Development Program*, Docket No. 0660-ZA29, at Section III (defining community anchor institutions as "(s)chools, libraries, medical and healthcare providers, public safety entities, community colleges and other institutions of higher education, and other community support organizations and entities"), available at http://www.ntia.doc.gov/files/ntia/publications/fr_broadbandmappingnofa_090708.pdf.

¹⁰ Massachusetts Infrastructure data set, Commonwealth of Massachusetts' Office of Geographic Information. http://maps.massgis.state.ma.us/map_ol/oliver.php, viewed August 29, 2011.

¹¹ National Broadband Map Massachusetts Data Summary, June 30, 2010, National Telecommunications and Information Administration. <http://www.broadbandmap.gov/summarize/state/massachusetts>, viewed August 29, 2011.

of broadband availability at CAIs, informed in part by appropriate benchmarks, will allow the FCC to determine whether all Americans live in areas where broadband is capable of meeting community and residential needs.

II. AFFORDABILITY IS AN ESSENTIAL ELEMENT OF AVAILABILITY.

The FCC seeks comment on how it should evaluate cost of service (affordability) as a factor in its assessment of broadband availability.¹² The MTDC agrees with the FCC’s view that cost of broadband service is an important factor of availability.¹³ For purposes of Section 706, the FCC should not consider broadband available to a consumer unless two criteria are met: 1) the necessary infrastructure is deployed in the consumer’s area, and 2) the service offered to the customer is affordable.¹⁴ Indeed, one of the basic universal service principles enumerated by Congress in Section 254 of the Act is that all Americans should receive “[q]uality services . . . at just, reasonable, and *affordable* rates.”¹⁵ In Massachusetts, the state legislature echoed similar principles in the act establishing the Massachusetts Broadband Institute, stating that the purpose of the institute “shall be to achieve the deployment of *affordable* and ubiquitous broadband access across the commonwealth.”¹⁶

To achieve the FCC’s goals, the MDTC reiterates its strong recommendation that the FCC adopt a functional availability analysis for purposes of Section 706. Mere physical

¹² NOI, ¶ 23.

¹³ *Id.*

¹⁴ MDTC Comments, *In the Matter of Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans In a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, GN Docket No. 10-159 (filed Oct. 5, 2010) available at <http://fjallfoss.fcc.gov/ecfs/document/view?id=7020915803>.

¹⁵ 47 U.S.C. § 254(b)(1) (emphasis added).

¹⁶ The MBI is a quasi-public agency tasked by Governor Deval Patrick to meet the broadband access needs of unserved citizens throughout Massachusetts. See *An Act Establishing and Funding the Massachusetts Broadband Institute*, Chapter 231 of the Acts of 2008, codified at G. L. c. 40J, §§ 6B-C.

presence of broadband in an area does not equate to broadband availability if the service is not used by residents or businesses. Affordability is a key factor the FCC must consider for areas where broadband might be present, but not used.¹⁷

The MDTC is encouraged that the FCC plans to move forward with reform of the Form 477 data collection process to include pricing data.¹⁸ Once this revision process is complete, the collection of pricing data will allow the FCC to better fulfill its Section 706 mandate to examine the availability of advanced services.¹⁹ In addition, the FCC's collection of price data holds tremendous potential value to state commissions, allowing states to conduct more thorough examinations of availability of advanced services and the competitive landscape.

The MTDC's 2010 Competition Status Report analyzed competition in the telephone and cable television markets in Massachusetts.²⁰ The availability of Massachusetts broadband pricing data, such as that contemplated by the FCC, could significantly improve the MDTC's understanding of broadband market conditions and consumer impacts. The FCC, consequently, should enhance its understanding of broadband availability and affordability by collecting broadband pricing data. The FCC should also set the parameters under which state commissions can access their state-specific data for their own analyses of broadband affordability and availability.

¹⁷ Joint Comments of the Vermont Department of Public Service, the Massachusetts Broadband Institute, and the Massachusetts Department of Telecommunications and Cable, *In the Matter of the Commission's Consultative Role in the Broadband Provisions of the Recovery Act*, GN Docket No. 09-40, at 10 (filed Apr. 13, 2009), available at <http://fjallfoss.fcc.gov/ecfs/document/view?id=6520210451> (emphasis added) (filing copy of NTIA joint comments with the FCC in lieu of comments responding to the FCC's request for information, GN Docket No. 09-40, issued on March 24, 2009, seeking comments on the same definitional issues).

¹⁸ NOI, ¶ 11, fn. 80.

¹⁹ *Seventh Broadband Progress Report*, ¶¶ 18-20.

²⁰ MDTC Report, "Competition Status Report," (rel. Feb. 12, 2010), also available at http://www.mass.gov/Eoca/docs/dtc/compreport/CompetitionReport_Combined.pdf.

III. BROADBAND SPEED DATA ARE ALSO CRITICAL WHEN MEASURING AVAILABILITY.

The Seventh Broadband Progress Report measured broadband availability utilizing data collected through two data sets generated by the SBDD Grant Program and the FCC Form 477.²¹ These two data sets present challenges to the FCC in conducting a comprehensive assessment of broadband availability. Both data sets have an inherent lack of granularity and both do not report the maximum actual speed possible in a given area.²² While limited when used individually, the combined data sets still allow the FCC to measure broadband availability using comparative analysis techniques. Multiple data sets will likely remain necessary until such a time that more granular data, such as address level deployment data of actual speeds, is provided by carriers and independently verified.

The Sixth Broadband Progress Report updated the FCC's benchmark for determining the availability of broadband to a service offering minimal actual speeds of 4Mbps download transfer rate and 1 Mbps upload transfer rate.²³ The FCC maintained this 4/1 benchmark for the Seventh Broadband Progress Report.²⁴ However, both the Sixth and Seventh Broadband Progress Reports used a minimal threshold of 3Mbps download transfer rate and 768 kbps upload transfer rate to determine broadband availability.²⁵ The reports measure availability at the lower threshold level because current data collection efforts do not match the benchmark of 4Mbps/1Mbps. Rather, the FCC uses this 3/768 threshold based on the pre-determined speed

²¹ *Seventh Broadband Progress Report*, ¶ 17.

²² *Id.*, Appendix F, ¶¶ 9-19, 22-31.

²³ *Sixth Broadband Progress Report*, ¶11.

²⁴ *Seventh Broadband Progress Report*, ¶15.

²⁵ *Sixth Broadband Progress Report*, ¶20; *Seventh Broadband Progress Report*, ¶25.

tiers collected through both the SBDD and the FCC Form 477.²⁶ As the Seventh Broadband Progress Report notes, the benchmark is calculated with household usage in mind, and the 3//768 threshold is a reasonable approximation of the 4/1 benchmark.²⁷

The Eighth Broadband Progress Report should maintain the technology-neutral speed 4/1 benchmark used in the previous two Broadband Progress Reports. The benchmark should not be revised to match the available data. As the NOI notes, the FCC plans to move forward with reforms to the Form 477 data collection process.²⁸ The MDTC supports this approach. As the MDTC has previously noted, the data collection programs should be revised to match the FCC's benchmark.²⁹ The benchmark was identified by the National Broadband Plan as representative of the needs and expectations of the present day consumer, and it follows that any modification of the benchmark is made only after an examination and finding that the needs and expectations of the consumer have changed and not because pre-determined data collection does not match the identified benchmark.³⁰

²⁶ *Seventh Broadband Progress Report*, ¶¶ 25 and 30.

²⁷ *Id.*, ¶ 56.

²⁸ NOI, ¶ 11.

²⁹ *In the Matter of Modernizing the FCC Form 477 Data Program, Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscriber Data, and Development of Data on interconnected Voice over Internet Protocol Subscriber Data, Service Quality, Customer Satisfaction, Infrastructure and Operating Data Gathering, Review of Wireline Competition Bureau Data Practices*, WC Docket No. 11-10, WC Docket No 07-38, WC Docket No. 08-190, and WC Docket No. 10-132, MTDC Comments (filed Mar. 30, 2011), pp. 3-4.

³⁰ Federal Communications Commission, *Connecting America: The National Broadband Plan* (2010) at 135, available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-296935A1.pdf (viewed Aug. 26th, 2011).

IV. CONCLUSION

For these reasons, the FCC should measure availability to community anchor institutions as part of its Section 706 report to Congress. Furthermore, the FCC should include collect pricing data to measure affordability and broadband availability. Finally, the FCC should maintain the technology-neutral speed benchmark of 4 Mbps download / 1 Mbps upload used in the two previous Broadband Progress Reports.

Respectfully submitted,

GEOFFREY G. WHY, COMMISSIONER

By: /s/ Benedict G. Dobbs

Benedict G. Dobbs

Deputy Director, Competition Div.

Joseph P. Tiernan

Sr. Research Analyst, Competition Div.

Massachusetts Department of
Telecommunications and Cable
1000 Washington Street, Suite 820
Boston, MA 02118-6500
Phone: 617-305-3580

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